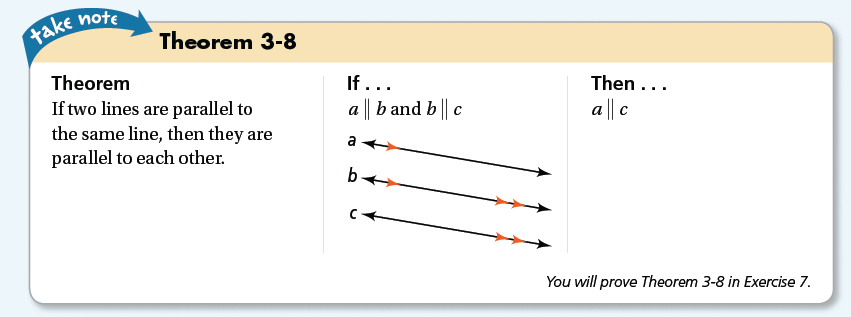
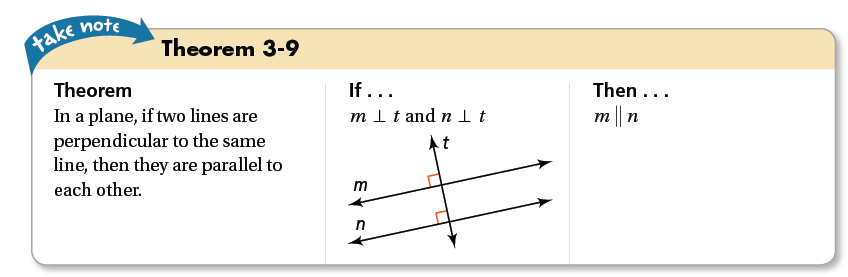
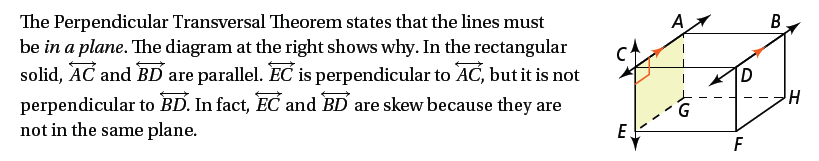
Chapter 3-4 Notes



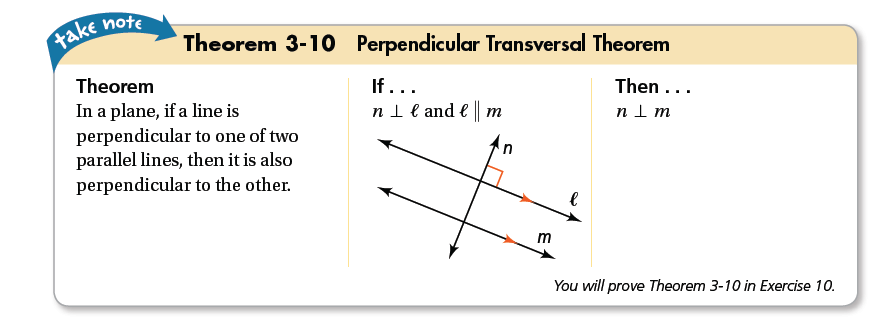
This theorem allows us to have as many parallel lines as we like ***all with the same properties***.



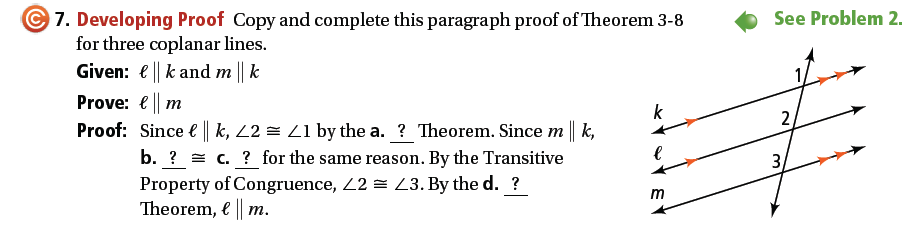
The phrase “in a plane” is significant. If the lines were not in the same plane then a skew line could count as perpendicular, even though it never intersects!



This theorem states that ***lines that are perpendicular to the same line must be parallel to each other***.



Finally, this theorem states that **any line that is perpendicular to one line is also perpendicular to any and all lines that are parallel to that first line.**

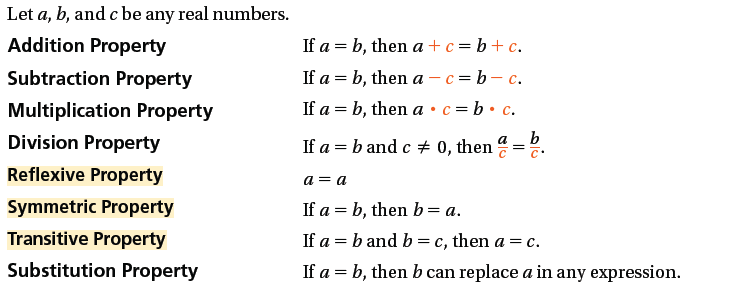


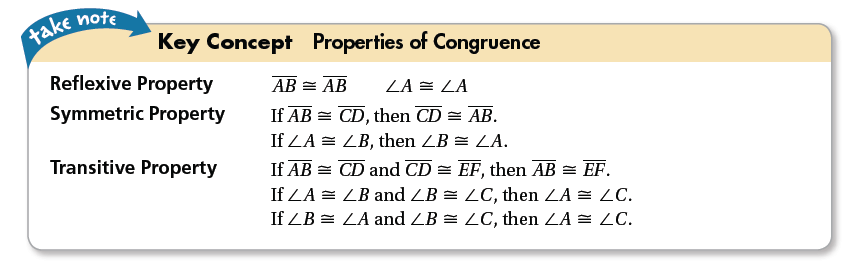
A) Check your reference sheet. How are angles 1 and 2 related?

B and C) What other angle pair shares that same relationship?

D) What theorem states that if two corresponding angles are congruent then the lines they correspond to are parallel?

Review





**Remember the difference between properties of congruence and properties of equality!**